

*West Virginia Department of Environmental Protection
Division of Air Quality*

*Joe Manchin, III
Governor*

*Stephanie R. Timmermeyer
Cabinet Secretary*

Permit to Operate



*Pursuant to
Title V
of the Clean Air Act*

Issued to:
ISG Weirton Inc.
Mittal Steel USA - Weirton, Inc.
R30-02900001-2006 (Part 1 of 3)

*John A. Benedict
Director*

*Issued: May 31, 2006 • Effective: July 1, 2006
Expiration: May 31, 2011 • Renewal Application Due: November 30, 2010*

Permit Number: **R30-02900001-2006 (Part 1 of 3)**
Permittee: ~~ISG Weirton Inc.~~ Mittal Steel USA - Weirton, Inc.
Mailing Address: **400 Three Springs Drive Weirton, WV 26062-4989**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Weirton, Hancock County, West Virginia
Mailing Address: 400 Three Springs Drive Weirton, WV 26062-4989
Telephone Number: 304-797-2000
Type of Business Entity: Corporation
Facility Description: Steel Mill
SIC Codes: 3312
UTM Coordinates: 533.70 km Easting • 4474.50 km Northing • Zone 17

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
BOILERS					
087	S402	HP Boiler 1 - <u>Not to be operated</u>	1936	540 mmBtu/hr	N/A
088	S404	HP Boiler 2 - <u>Not to be operated</u>	1936	540 mmBtu/hr	N/A
089	S405	HP Boiler 3; blast furnace gas, natural gas, fuel oil.	1940	540 mmBtu/hr	N/A
090	S406	HP Boiler 4; blast furnace gas, natural gas, fuel oil.	1947	540 mmBtu/hr	N/A
091	S407	HP Boiler 5; blast furnace gas, natural gas, fuel oil.	1952	600 mmBtu/hr	N/A
092	S408	Foster Wheeler Boiler 101; natural gas or blast furnace gas	1980	525 mmBtu/hr	N/A
093	S408	Foster Wheeler Boiler 102; natural gas or blast furnace gas	1980	525 mmBtu/hr	N/A
		LP Boiler #1 - <u>Not to be operated</u>			
		LP Boiler #2 - <u>Not to be operated</u>			
		LP Boiler #3 - <u>Not to be operated</u>			
		LP Boiler #4 - <u>Not to be operated</u>			
		LP Boiler #15 - <u>Not to be operated</u>			

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NESHAPS	National Emissions Standards for
CBI	Confidential Business Information		Hazardous Air Pollutants
CEM	Continuous Emission Monitor	NO_x	Nitrogen Oxides
CES	Certified Emission Statement	NSPS	New Source Performance
C.F.R. or CFR	Code of Federal Regulations		Standards
CO	Carbon Monoxide	PM	Particulate Matter
C.S.R. or CSR	Codes of State Rules	PM₁₀	Particulate Matter less than 10µm in
DAQ	Division of Air Quality		diameter
DEP	Department of Environmental	pph	Pounds per Hour
	Protection	ppm	Parts per Million
FOIA	Freedom of Information Act	PSD	Prevention of Significant
HAP	Hazardous Air Pollutant		Deterioration
HON	Hazardous Organic NESHAP	psi	Pounds per Square Inch
HP	Horsepower	SIC	Standard Industrial Classification
lbs/hr	Pounds per Hour	SIP	State Implementation Plan
LDAR	Leak Detection and Repair	SO₂	Sulfur Dioxide
M	Thousand	TAP	Toxic Air Pollutant
MACT	Maximum Achievable Control	TPY	Tons per Year
	Technology	TRS	Total Reduced Sulfur
MM	Million	TSP	Total Suspended Particulate
MMBtu/hr or	Million British Thermal Units per	USEPA	United States Environmental
mmbtu/hr	Hour		Protection Agency
MMCF/hr or	Million Cubic Feet Burned per	UTM	Universal Transverse Mercator
mmcf/hr	Hour	VEE	Visual Emissions Evaluation
NA	Not Applicable	VOC	Volatile Organic Compounds
NAAQS	National Ambient Air Quality		
	Standards		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.

[45CSR§30-5.1.b.]

- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.

[45CSR§30-4.1.a.3.]

- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.

[45CSR§30-6.3.b.]

- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.

[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:

- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
- b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
- c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
 - f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.
[45CSR§30-5.9]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. A permitted source may trade increases and decreases in emissions within the facility, where rules promulgated by the Secretary pursuant to provisions of Title I of the Clean Air Act and which are contained in the State Implementation Plan for West Virginia provide for such emissions trades without a permit modification. In such a case, the advance written notice provided by the permittee shall identify the applicable requirements allowing trading and shall state when the change will occur, the types and quantities of emissions to be traded, the permit terms or other applicable requirements with which the source will comply through emissions trading, and such other information as may be required by the Secretary.

[45CSR§30-5.8.b.]

- 2.11.4. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.5. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
- b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
- c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary, in acting on the permit application or revision, has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

3.0. Facility-Wide Requirements for Part 1 of Facility

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health.
[40 C.F.R. 61 and 45CSR15]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14) State-Enforceable only.]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
- [40 C.F.R. 82, Subpart F]**

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. **NO_x Budget Trading Program.** The permittee shall comply with the standard requirements set forth in the attached NO_x Budget Permit Application (See Appendix A) and the NO_x Budget Permit requirements set forth in 45CSR1 for each NO_x budget source. The complete NO_x Budget Permit Application shall be the NO_x Budget Permit portion of the Title V permit administered in accordance with 45CSR30.

[45CSR§§1-6.1.b. and 20.1.]

- a. The NO_x Budget portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§1-2 and, upon recordation by the Administrator under 45CSR§1-50 through 45CSR§1-57, 45CSR§1-60 through 45CSR§1-62 or 45CSR§1-80 through 45CSR§1-88, every allocation, transfer or deduction of a NO_x allowance to or from the compliance accounts of the NO_x Budget units covered by the permit or the overdraft account of the NO_x budget source covered by the permit.

[45CSR§1-23.2.]

- b. Except as provided in 45CSR§1-23.2, the Director will revise the NO_x Budget portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.

[45CSR§1-24.1.]

3.2. Monitoring Requirements

- 3.2.1. None

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test

methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15), 45CSR§2-8.1. and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

- 3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class, or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate in writing:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.

[45CSR§30-8.]

- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.

[45CSR§30-5.3.e.]

- 3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.

[45CSR§30-5.1.c.3.A.]

- 3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. Deviations.

- a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. None

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

- a. **45CSR13** - Permit R13-501 authorizes the construction of 2 LP natural gas fired boilers, however Consent Order #8-2003 prohibits the company from operating the LP boilers, therefore the conditions from this permit were not included in the Title V permit.
- b. **November 1990 Consent Order** - The November 1990 Consent Order authorized PM and SO₂ limits on the HP and LP boilers and was entered in the State Implementation Plan (SIP). However, the SIP was found to be inadequate to attain and maintain the NAAQS for SO₂ and a subsequent, more stringent Consent Order was signed in January 1995. Therefore the requirements from the November 1990 Consent Order were not included in the Title V Permit.
- c. **January 1995 Consent Order** - The January 1995 Consent Order authorized SO₂ emission limits on the HP boilers, restricted the fuel type to the Foster Wheeler boilers and prohibited operation of the LP boilers and was entered into the SIP. It was determined that more stringent requirements were necessary, therefore the August 2003 Consent Order was developed and the requirements from the January 1995 Consent Order were not included in the Title V Permit.

4.0. Source-Specific Requirements [Boilers]

4.1. Limitations and Standards

- 4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. Compliance with this limit shall demonstrate compliance with the less stringent limitation of 40 C.F.R. § 60.42(a)(2) for Foster Wheeler Boilers 101 and 102.

[45CSR§2-3.1.; and 45CSR16 & 40 C.F.R. § 60.42(a)(2) for Foster Wheeler Boilers 101 and 102]

- 4.1.2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the following:

Emission Unit ID	Description	PM Limit
089, 090, and 091	HP Boilers 3, 4, and 5	151.2 pph

Compliance with this limit shall demonstrate compliance with the less stringent limitation of CO 11-1990.

[45CSR§§2-4.1., 4.1.b., and 4.3. and CO 11-1990]

- 4.1.3. The visible emission standards set forth in Section 4.1.1. of this permit shall apply at all times except in periods of start-ups, shutdowns and malfunctions.

[45CSR§2-9.1.]

- 4.1.4. At all times, including periods of start-ups, shutdowns and malfunctions, the permittee shall, to the extent practicable, maintain and operate any fuel burning units including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source.

[45CSR§2-9.2.]

- 4.1.5. No person shall circumvent the provisions of 45CSR10 by constructing fuel burning unit(s) larger than would be necessary to provide heat and/or power for an existing manufacturing plant, with a reasonable margin for plant expansion, in order to use that design heat input to raise the allowable sulfur content in fuel.

[45CSR§10-3.6.]

- 4.1.6. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. The permittee shall not allow emissions to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month and during this one (1) continuous twenty-four hour period, the permittee shall not allow emissions to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day

[45CSR§10-3.8.]

- 4.1.7. No owner or operator shall build, erect, install, modify or use any article, machine, equipment or process, the use of which purposely conceals an emission which would otherwise constitute a violation of an applicable

standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[45CSR§10-11.1.]

- 4.1.8. Emissions of particulate matter are not to exceed 11 pounds per hour from either of the two Foster Wheeler boilers #101 and 102 and total particulate emissions are not to exceed 68 tons/year from both boilers in accordance with Permit Application No. 515. Compliance with this limit shall demonstrate compliance with the less stringent limitation of 45CSR§§2-4.1., 4.1.b., and 4.3., and 40 C.F.R. §60.42(a)(1).
[45CSR13 - R13-515, 45CSR§§2-4.1., 4.1.b., and 4.3., 45CSR16, and 40 C.F.R. § 60.42(a)(1)]

- 4.1.9. The permittee agrees to comply with the following SO₂ control requirements:

- a. High Pressure Boilers 1 and 2 shall not be operated by the Company.
- b. Low Pressure Boilers LP1, LP2, LP3, LP4, and LP15 shall not be operated by the Company.
- c. Coal shall not be fired at any boiler operated by the Company.
- d.
 1. SO₂ emissions from High Pressure Boilers 3, 4, and 5 shall be limited by restricting the firing of fuel oil to a rate dependent upon the sulfur content of the fuel oil fired as described in Appendix B. The allowable fuel oil firing rate shall be the 3-hour block average derived from Appendix B expressed in total gallons of fuel oil fired at High Pressure Boilers 3, 4, and 5 over a 3-hour block period.
 2. The percentage of sulfur contained in the fuel oil purchased to be fired at the company's high pressure boilers shall not exceed 3%.
 3. Total fuel oil and sulfur content fired at boilers 3, 4, & 5 shall be limited to the product of (gpm)*(%S) being less than or equal to the emission factor of 91.7 as per the curve shown in Appendix B.
- e. Foster Wheeler Boilers #101 & #102 shall have a combined limit of 109.73 lbs per hour of SO₂ as determined by fuel usage and emission factors for SO₂ (as determined by testing for blast furnace gas, AP-42 factors, or other emission factors approved by the DEP). These boilers shall be limited to firing only blast furnace gas, natural gas, and mixed gas (comprised of approximately 70% natural gas and 30% air). Testing has demonstrated an emission factor of 14.45 pounds of SO₂ per million cubic feet of blast furnace gas combusted.

Compliance with these limits shall demonstrate compliance with the less stringent limitations of 45CSR§10-3.1.e.; and with 40 C.F.R. § 60.43(a)(2) for Foster Wheeler Boilers 101 and 102.

[CO-SIP-C-2003-28, Conditions IV.3.(b), (c), (d), (e), and (g), 45CSR§10-3.1.e., 45CSR16, and 40 C.F.R. § 60.43(a)(2)]

- 4.1.10. No owner or operator subject to the provisions of 40 C.F.R. Part 60, subpart D shall cause to be discharged into the atmosphere from Foster Wheeler Boilers 101 and 102 any gases which contain nitrogen oxides, expressed as NO₂ in excess of 0.20 lb per million Btu derived from gaseous fossil fuel.
[45CSR16 and 40 C.F.R. § 60.44(a)(1)]

- 4.11. a. The CAIR designated representative of each CAIR NO_x Ozone Season source required to have a Title V operating permit and each CAIR NO_x Ozone Season unit required to have a Title V operating permit at the source will submit to the Secretary a complete CAIR permit application under section 22 in accordance

with the deadlines specified in 45CSR§§40-21.1 and 21.2; and submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

- b. The owners and operators of each CAIR NO_x Ozone Season source required to have a Title V operating permit and each CAIR NO_x Ozone Season unit required to have a Title V operating permit at the source will have a CAIR permit issued by the Secretary under 45CSR40, sections 20 through 24 for the source and operate the source and the unit in compliance with such CAIR permit.

[45CSR§40-6.1.a. and b.]

4.2. Monitoring Requirements

- 4.2.1. The permittee shall monitor compliance with section 4.1.1. as set forth in an approved monitoring plan for each emission unit (see Appendix C).

[45CSR§§2-3.2. and 8.2.]

- 4.2.2.
 - a. At the request of the Director, the permittee shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR10. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation.
 - b. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.
 - c. The permittee shall demonstrate compliance with Section 3 of 45CSR10 by testing and/or monitoring in accordance with an approved monitoring plan for each emission unit (see Appendix C).
 - d. Excursions outside the range of operating parameters associated with control or process equipment which are established in an approved monitoring plan will not necessarily constitute a violation of 45CSR10.

[45CSR§10-8.2.]

- 4.2.3. The owners and operators, and to the extent applicable, the CAIR designated representative of a CAIR NO_x Ozone Season unit, must comply with the monitoring, recordkeeping and reporting requirements as provided in 45CSR40, sections 70 through 76 and Subpart H of 40 CFR Part 75.

[45CSR§40-70]

- 4.2.4. The permittee shall monitor and record the total number of gallons of fuel oil fired at High Pressure Boilers 3, 4, and 5 over every 3-hour block time period. The Company shall maintain records of the fuel oil usage for a period of 5 years and make such records available to DEP upon request.

[CO-SIP-C-2003-28, Condition V.1.]

- 4.2.5. The permittee shall require offsite suppliers of fuel oil to provide a copy of a fuel oil analysis certification from the supplier for each shipment of fuel oil received. Copies of such certifications shall be maintained by the Company for a period of 5 years and made available to the DEP upon request.

[CO-SIP-C-2003-28, Condition V.2.]

4.2.6. The permittee shall conduct fuel oil analysis in accordance with American Society for Testing and Materials (ASTM) approved procedures and test methods to determine the sulfur content of the fuel oil fired at High Pressure Boilers 3, 4, and 5. The fuel oil analysis will be conducted each time the "as burned" fuel oil sulfur content is reasonably expected to increase by virtue of any addition of oil to the day tank used to circulate the oil to the burners. Fuel oil analysis shall be conducted at a minimum once per calendar quarter unless fuel oil is not fired for the reporting quarter. The Company shall maintain records of the fuel oil analysis for a period of 5 years and make such records available to DEP upon request.
[CO-SIP-C-2003-28, Condition V.3.]

4.2.7. The permittee shall monitor and record the amount of natural gas, blast furnace gas, and mixed gas combusted at all of the sources subject to numerical emission limits in Section 4.1.9. of this permit. The Company shall maintain records of the fuel usage for a period of 5 years and make such records available to DEP upon request.
[CO-SIP-C-2003-28, Condition V.4.]

4.2.8. Compliance with the numerical emission limits set forth in Section 4.1.9.e. of this permit shall be demonstrated based on emission calculations using the applicable daily fuel usage data and emission factors for SO₂ (14.45 pounds of SO₂ per million cubic feet for combustion of blast furnace gas as determined by testing).
[CO-SIP-C-2003-28, Condition V.5.]

4.3. Testing Requirements

4.3.1. The permittee shall demonstrate compliance with Section 4.1.1. by periodic testing in accordance with 40 CFR Part 60, Appendix A, Method 9 and the approved monitoring plan (See Appendix C); and with Section 4.1.2. by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in Section 4.3.2. of this permit or other equivalent EPA approved method approved by the Director.
[45CSR§2-8.1.]

4.3.2. The permittee shall periodically conduct or have conducted, weight emission tests to determine the compliance of the fuel burning units with the weight emission standards set forth in sections 4.1.2. and 4.1.8. Weight emission tests shall be conducted in accordance with 45CSR2 Appendix "Compliance Test Procedures for 45CSR2" or other equivalent EPA approved method approved by the Director. The baseline compliance test shall be conducted within a time period starting twelve (12) months prior to and ending twelve (12) months after the effective date of this permit for existing fuel burning units and within one hundred eighty (180) days of start-up for fuel burning units not currently in service. The test results of the initial baseline test shall establish the weight emission testing cycle to be used for subsequent testing. If the initial baseline test results show emissions to be less than 20% of the weight emission standard, no further testing shall be required unless there is a change in fuel. Otherwise, weight emission tests shall be conducted at a frequency established in the following table:

Test	Test Results	Test Frequency
Initial Baseline	≤50% of weight emission standard	Once/3 years
Initial Baseline	between 50% and 80% of weight emission standard	Once/2 years
Initial Baseline	≥80% of weight emission standard	Annual
Annual	after three successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Annual	after two successive tests indicate mass emission rates < 80% of weight emission standard	Once/2 years

Test	Test Results	Test Frequency
Annual	any test indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual
Once/2 years	after two successive tests indicate mass emission rates $\leq 50\%$ of weight emission standard	Once/3 years
Once/2 years	any test indicates a mass emission rate $< 80\%$ of weight emission standard	Once/2 years
Once/2 years	any test indicates a weight emission rates $\geq 80\%$ of weight emission standard	Annual
Once/3 years	any test indicates a mass emission rate $\leq 50\%$ of weight emission standard	Once/3 years
Once/3 years	Any test indicates a mass emission rate between 50% and 80% of weight emission standard	Once/2 years
Once/3 years	Any test indicates a mass emission rate $\geq 80\%$ of weight emission standard	Annual

[45CSR§2-8.1., 45CSR§2A-5.2., and 45CSR§30-5.1.c.]

- 4.3.3. a. The permittee may be required to conduct or have conducted tests to determine the compliance of such sources with the emission limitations of section 3 of 45CSR10. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

- b. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in 45CSR10, section 3.

[45CSR§10-8.1.]

4.4. Recordkeeping Requirements

- 4.4.1. a. The permittee shall maintain on-site all records of monitored data established in the monitoring plan pursuant to Sections 4.2.1. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years. Where appropriate the permittee may maintain such records in electronic form.

[45CSR§2-8.3.a. and d. and 45CSR§10-8.3.a. and d.]

4.5. Reporting Requirements

- 4.5.1. The permittee shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.

[45CSR§2-8.3.b. and 45CSR§10-8.3.b.]

- 4.5.2. The permittee shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following subdivisions:
- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 2. Excess opacity does not exceed 40%.
 - b. The permittee shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in section 4.5.2.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The permittee shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 1. A detailed explanation of the factors involved or causes of the malfunction;
 2. The date and time of duration (with starting and ending times) of the period of excess emissions;
 3. An estimate of the mass of excess emissions discharged during the malfunction period;
 4. The maximum opacity measured or observed during the malfunction;
 5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.
- [45CSR§2-9.3.]**
- 4.5.3. Duty to apply. -- The CAIR designated representative of any CAIR NO_x Ozone Season source required to have a Title V operating permit will submit to the Secretary a complete CAIR permit application in accordance with 45CSR§40-22 for the source covering each CAIR NO_x Ozone Season unit at the source at least 18 months (or such lesser time provided by the Secretary) before the later of January 1, 2009 or the date on which the CAIR NO_x Ozone Season unit commences operation.
[45CSR§40-21.1.]
- 4.5.4. Duty to reapply. -- For a CAIR NO_x Ozone Season source required to have a Title V operating permit, the CAIR designated representative will submit a complete CAIR permit application in accordance with 45CSR§40-22 for the source covering each CAIR NO_x Ozone Season unit at the source to renew the CAIR permit in accordance with 45CSR30.
[45CSR§40-21.2.]
- 4.5.5. Excess emission and monitoring system performance (MSP) reports shall be submitted to the Administrator semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the

information required in 40 C.F.R. §60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

Nitrogen oxides. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under Section 4.1.10.
[45CSR16 and 40 C.F.R. § 60.45(g)]

4.6. Compliance Plan

4.6.1. None.

APPENDIX A
NO_x Budget Permit Application

Page 1



This NO_x Budget Permit Application is submitted under: ☒ 45CSR1 ☐ 45CSR26 ☒ Section 126
(Please check all that apply)

This submission is: ☒ New ☐ Revised

STEP 1

Identify the source by plant name, State, and ORIS or facility code.

WEIRTON STEEL CORPORATION	540290001	54344
Plant Name	Company ID Number	ORIS/Facility Code

STEP 2

Enter the unit ID# and description for each NO. Budget Unit.

D. No. 24-1 Reg. 1
 Company Wentworth Seed
 Facility Wentworth Region 1
 Initials Jma

[illegible]

STEP 3

Read the standard requirements and the certification, enter the name of the NO_x authorized account representative, and sign and date.

Standard Requirements

(a) Permit Requirements.

(1) The NO_x authorized account representative of each NO_x Budget source required to have a federally enforceable permit and each NO_x Budget unit required to have a federally enforceable permit at the source shall:

(i) Submit to the Director of the Division of Air Quality (Director) a complete NO_x Budget permit application under 45CSR1-22, 45CSR26-22, and/or § 97.22 in accordance with a deadline specified by the Director under 45CSR1-21.2 and 21.3, 45CSR26-21.2 and 21.3, and/or § 97.21(b) and (c) as applicable;

(f) Submit in a timely manner any supplemental information that the Director determines is necessary in order to review a NO_x Budget permit application and issue or deny a NO_x Budget permit.

(2) The owners and operators of each NO_x Budget source required to have a federally enforceable permit and each NO_x Budget unit required to have a federally enforceable permit at the source shall have a NO_x Budget permit issued by the Division of Air Quality and operate the unit in compliance with such NO_x Budget permit.

● 此题考查了函数的性质，解题的关键是理解函数的定义域和值域。

(b) Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring requirements of sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97, as applicable.
- (2) The emissions measurements recorded and reported in accordance with sections 70 through 76 of 45CSR1 or 45CSR26, and/or subpart H of 40 CFR part 97 shall be used to determine compliance by the unit with the NO_x Budget emissions limitation under paragraph (c).

(c) Nitrogen Oxides Requirements.

- (1) The owners and operators of each NO_x Budget source and each NO_x Budget unit at the source shall hold NO_x allowances available for compliance deductions under subsections 45CSR1-54.1, 54.2, 54.5, or 54.6; 45CSR26-54.1, 54.2, 54.5, or 54.6; and/or § 97.54(a), (b), (e), or (f), as applicable, as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the ozone season from the unit, as determined in accordance with sections 70 through 76 of 45CSR1 or 45CSR26 and/or subpart H of 40 CFR part 97, as applicable, plus any amount necessary to account for actual heat input under subsection 42.5 of 45CSR1 or 45CSR26, and/or § 97.42(e) for the ozone season period or to account for excess emissions for a prior ozone season under subsection 54.4 of 45CSR1 or 45CSR26, and/or § 97.54(d), or to account for withdrawal from the NO_x Budget Trading Program, or a change in regulatory status of a NO_x Budget opt-in unit under sections 86 or 87 of 45CSR1, and/or § 97.86 or § 97.87, as applicable.
- (2) Each ton of nitrogen oxides emitted in excess of the NO_x Budget emissions limitation shall constitute a separate violation of 45CSR1 or 45CSR26, §§22-5-1 et seq., and/or 40 CFR part 97, and the Clean Air Act.
- (3) A NO_x Budget unit shall be subject to the requirements under paragraph (c)(1) starting on the later of: May 31, 2004 for NO_x Budget units under 45CSR1, 45CSR26 and/or 40 CFR part 97; or the date on which the unit commences operation.
- (4) NO_x allowances shall be held in, deducted from, or transferred among NO_x Allowance Tracking System accounts in accordance with sections 40 through 43, 50 through 57, 60 through 62, and 70 through 76 of 45CSR1 or 45CSR26; sections 80 through 88 of 45CSR1, and/or subparts E, F, G, and I of 40 CFR part 97, as applicable.
- (5) A NO_x allowance shall not be deducted, in order to comply with the requirements under paragraph (c)(1), for an ozone season in a year prior to the year for which the NO_x allowance was allocated.
- (6) A NO_x allowance allocated by the Director or EPA Administrator under the NO_x Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_x Budget Trading Program. No provision of the NO_x Budget Trading Program, the NO_x Budget permit application, the NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26, and/or § 97.4(b) or § 97.5, as applicable, and no provision of law shall be construed to limit the authority of the Division of Environmental Protection or the United States to terminate or limit such authorization.
- (7) A NO_x allowance allocated by the Director or EPA Administrator under the NO_x Budget Trading Program does not constitute a property right.
- (8) Upon recordation by the EPA Administrator, every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x Budget unit's compliance account or the overdraft account of the source where the unit is located is incorporated automatically in any NO_x Budget permit of the NO_x Budget unit.

(d) Excess Emissions Requirements.

- (1) The owners and operators of a NO_x Budget unit that has excess emissions in any ozone season shall:
- (i) Surrender the NO_x allowances required for deduction under subdivision 54.4.a of 45CSR1 or 45CSR26, and/or § 97.54(d)(1) as applicable; and
 - (ii) Pay any fine, penalty, or assessment or comply with any other remedy imposed under subdivision 54.4.c of 45CSR1 or 45CSR26, and/or § 97.54(d)(3).

(e) Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Director or the EPA Administrator.
- (i) The account certificate of representation under 45CSR1-13 or 45CSR26-13 and/or § 97.13, as applicable, for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new account certificate of representation under 45CSR1-13 or 45CSR26-13 and/or § 97.13 (as applicable) changing the NO_x authorized account representative.
 - (ii) All emissions monitoring information, in accordance with sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97 (as applicable); provided that to the extent that sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Budget Trading Program.
 - (iv) Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.
- (2) The NO_x authorized account representative of a NO_x Budget source and each NO_x Budget unit at the source shall submit the reports and compliance certifications required under the NO_x Budget Trading Program, including those under sections 30 and 70 through 76 of 45CSR1 or 45CSR26; sections 80 through 88 of 45CSR1, and/or subparts D, H, or I of 40 CFR part 97, as applicable.

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(f) Liability.

(1) Any person who knowingly violates any requirement or prohibition of the NO_x Budget Trading Program, a NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26; and/or § 97.4(b) or § 97.5 shall be subject to enforcement pursuant to W. Va. Code §§22-5-1 et seq. or the Clean Air Act.

(2) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x Budget Trading Program shall be subject to criminal enforcement pursuant to §§22-5-1 et seq. or the Clean Air Act.

(3) No permit revision shall excuse any violation of the requirements of the NO_x Budget Trading Program that occurs prior to the date that the revision takes effect.

(4) Each NO_x Budget source and each NO_x Budget unit shall meet the requirements of the NO_x Budget Trading Program.

(5) Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget source or the NO_x authorized account representative of a NO_x Budget source shall also apply to the owners and operators of such source and of the NO_x Budget units at the source.

(6) Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget unit or the NO_x authorized account representative of a NO_x budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under sections 70 through 76 of 45CSR1 or 45CSR26, and/or subpart H of 40 CFR part 97, as applicable, the owners and operators and the NO_x authorized account representative of one NO_x Budget unit shall not be liable for any violation by any other NO_x Budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

(g) Effect on Other Authorities.

No provision of the NO_x Budget Trading Program, a NO_x Budget permit application, a NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26; and/or § 97.4(b) or § 97.5, shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x Budget source or NO_x Budget unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the NO_x Budget sources or NO_x Budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name MARK VIGNOVIC, DIRECTOR - ENVIRONMENTAL CONTROL DEPARTMENT	
Signature <i>Mark Vignovic</i>	Date JANUARY 10, 2002

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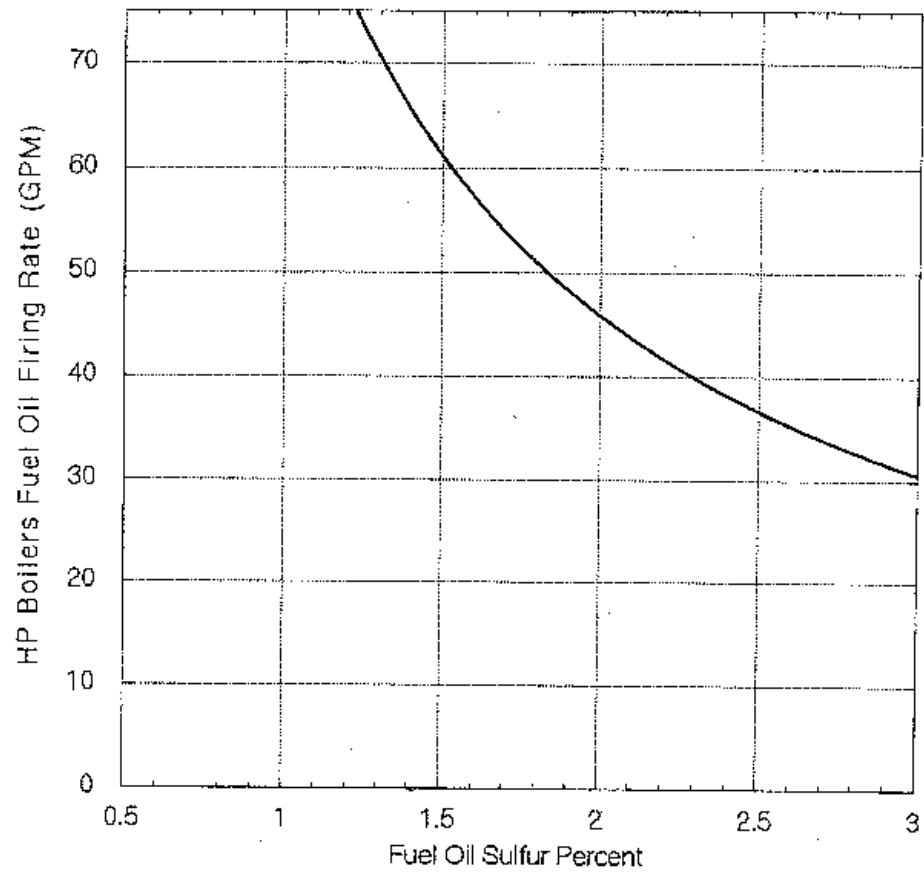
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APPENDIX B

Consent Order Graph of Fuel Firing Rate vs. % Sulfur

$$\text{GPM} = 91.7 * (1/\text{Sulfur Percent})$$



APPENDIX C

Rule 2 and 10 Monitoring Plans

**PROPOSED
MONITORING & RECORDKEEPING PLANS
FOR PARTICULATE SOURCES
UNDER 45 CSR 2
AT WEIRTON STEEL CORPORATION
WEIRTON, WEST VIRGINIA**

**FEBRUARY 2001
(Revised August 2001)**

(a) Regulatory Requirement

In accordance with 45 CSR 2 §8.2.a, the following is the proposed plan for monitoring compliance with the opacity standards set forth in 45 CSR 2 §3.

(b) Facility Information:

Facility Name: Weirton Steel Corporation
Facility Address: Weirton Steel Corporation
400 Three Springs Drive
Weirton, West Virginia 26062
Facility Contact: Clark Francy
(724) 797-3908

Facility Description:

Weirton Steel Corporation is an integrated steel mill.

It is located in the City of Weirton, Hancock County, West Virginia.

Operations include:

- Iron Making
- Steel Making
- Steel Rolling, Finishing and Coating

(c) Affected Units:

Units which are regulated by 45 CSR 2 are Fuel Burning Units as defined in 45 CSR 2, §2.10. The specific units affected are the facility's boilers No.'s 3, 4, 5, 101 and 102. (Boiler #2 is currently inactive, but would be added to this plan prior to being brought on-line.)

All Units are in excess of 250 mmBTU/hr of designed heat input (DHI).

Units 101 and 102 share a combined stack.

All boilers currently burn natural gas, mixed gas (dilute natural gas – 70%), blast furnace gas, fuel oil or a mixture of these fuels. Natural gas and mixed gas would be exempt from monitoring requirements (45 CSR 2A §3.1.a). The facility's boilers have a history of demonstrated compliance with the opacity regulations based upon Method 9 observations and compliance inspections. Therefore, the boilers should not require continuous opacity monitors (COMs) (45 CSR 2A §6.2.a.1).

Boilers #3 and 4 can also burn coal. Currently, coal is considered a back-up fuel and has not been used for some time. Until coal is burned, the installation of a COM on either of these boilers would provide no environmental benefit and therefore, installation of a COM would be an undue economic burden on the facility. Weirton has no current plans to use coal in these boilers, but wants to maintain this capability. To this end, Weirton Steel would submit for approval a revised particulate monitoring plan prior to burning coal in these boilers. With this understanding, Weirton is requesting an exemption from installing continuous emission monitors on these boilers under 45 CSR 2A §6.2b unless coal is used.

(d) Monitoring Methods

Monitoring will be performed on each of the affected sources per the attached "Source Summary Table".

(e) Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 2A §7.1a, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Date and time of start-up and shutdown
- Monthly quantity and type of fuel burned

Fuel Quality

- Annual supplier BTU analysis for natural gas and mixed gas (70% natural gas/30% make-up air)
- Summaries from average BTU content of Blast furnace gas from continuous monitors
- Shipment BTU and ash analysis for Fuel Oil

Operating Parameters

Per the requirements of 45 CSR 2A §6.3.a.2. – 3.a.6. Weirton will:

- Use video cameras to permit boiler operators to continually observe the stacks for boilers #3, #4, and #5 for smoke or other visual emissions while the boiler is in operation. (Fuel oil is used in these boilers and the cameras provide a means to ensure that changes in fuel oil/gas feed rate and mixture will not result in visible emissions. Cameras were not installed on boilers #101 and #102 due to limited variability in fuel make-up and compliance history.)
- If operators observe any visual emissions, proper adjustments to fuel feed rate, firing air and/or other relevant operating inputs will be made.
- If changes in operating inputs fail to correct the observed visual emissions, then the monitoring plan's excursion plan will be implemented.

The use of video cameras to permit stack observations was chosen to meet the requirements of 45 CSA 2A §6.3.a5 based upon:

- This approach is more thorough than monitoring other possible operating inputs.
- The type of fuels used.
- The compliance history of these units.
- This is an existing system.

The operating range, any visible emissions, was chosen based upon:

- Current operating practices
- Type of fuels used.
- Compliance history.

All records will be maintained for a period of 5 years.

(f) Excursion Response plan

If after a period of one hour visible emissions are still present, a Method 9 shall be performed for a minimum of 6 minutes for each hour until 4 successive six-minute observations demonstrate compliance.

For periods over one hour where visible emissions are observed, but proper conditions do not exist for Method 9 observations:

- The time when visible emissions were first observed will be recorded.
- The time when visible emissions were no longer apparent will be recorded.
- A Method 9 shall be performed when proper conditions are available, unless waived by the West Virginia Department of Environmental Protection.

Records of all excursion information will be maintained for a period of 5 years.

(g) Monitoring Summary and Excursion and Monitoring Plan Performance Reports

Per the requirements of 45 CSR 2A §7.2.c, the Monitoring Summary and Excursion and Monitoring Plan Performance Report shall be submitted to the Director on a quarterly basis except when the total percent of excursions is less than 1% and the total number of missing readings is less than 5%. Then, per 45 CSR 2A §7.2.c.1 – 2, the Excursion and Monitoring Plan Performance Report will be maintained on-site and shall be submitted to the Director upon request. All reports shall be postmarked by the thirtieth day following the end of each calendar quarter.

The Monitoring Summary Report will include for each source:

- Number of Operating Days
- Quantity and type of fuel used (where applicable)

The Excursion and Monitoring Plan Performance Report will:

- The date, time (starting and ending) and magnitude of each excursion
Identification of excursions occurring during start-ups, shutdowns and malfunctions
- The nature and cause of any excursion (if known), and the corrective action and preventative measures adopted (if any)
- The date and time when data is unavailable and the reason data is unavailable and the corrective action taken
- A statement noting when there are no excursions or periods of data unavailability

(h) Implementation Plan

Upon approval of this monitoring plan or any subsequent revisions to the plan, an implementation period is necessary to properly commence required testing, data gathering, monitoring, recordkeeping and reporting. The reporting and recordkeeping systems described in this plan require sixty days from the receipt of the final plan approval for implementation

Any modification to this plan requires the implementation schedule be reviewed and properly amended. Modifications are any changes to the submitted plan and include but are not limited to variations in monitoring or tracking methodology, additional instrumentation or other capital improvements, and/or additional requests or conditions.

WEIRTON STEEL CORPORATION SOURCE SUMMARY TABLE						
Emission Unit ID	Source	DHI (mmBTU/hr)	FUEL(S)	Applicable Standard	Proposed Monitoring	Frequency
089	Boiler #3	540	<ul style="list-style-type: none"> ▪ Mixed Gas ▪ BF Gas ▪ N Gas ▪ Fuel Oil ▪ Coal 	10% opacity 6 min. block avg. per 45 CSR 2 §3.1	1. Method 9 2. Stack video cameras 3. Revised & approved Plan if coal is used	1. Monthly 2. Continuously 3. As needed
090	Boiler #4	540	<ul style="list-style-type: none"> ▪ Mixed Gas ▪ BF Gas ▪ N Gas ▪ Fuel Oil ▪ Coal 	10% opacity 6 min. block avg. per 45 CSR 2 §3.1	1. Method 9 2. Stack video cameras 3. Revised & approved Plan if coal is used	1. Monthly 2. Continuously 3. As needed
091	Boiler #5	600	<ul style="list-style-type: none"> ▪ BF Gas ▪ N Gas ▪ Fuel Oil 	10% opacity 6 min. block avg. per 45 CSR 2 §3.1	1. Method 9 2. Stack video cameras	1. Monthly 2. Continuously
092	Boilers #101 & #102	1050 (total) 525 (each)	<ul style="list-style-type: none"> ▪ BF Gas ▪ N Gas 	10% opacity 6 min. block avg. per 45 CSR 2 §3.1	1. Method 9	1. Monthly

**WEIRTON STEEL CORPORATION
FUEL SUMMARY TABLE**

Fuel Type	Related Monitoring Requirement	Citation
Natural Gas (N gas)	Exempt from monitoring	45 CSR 2A §3.1.a
Mixed Gas 70% natural gas/30 % air	Exempt from monitoring	45 CSR 2A §3.1.a
BF Gas (Blast Furnace Gas) Process Generated Gas	Demonstrated compliance – COM not required	45 CSR 2A §6.2.a.1
Coal	Exemption requested from COMS requirement due to economic hardship – Coal is currently a back-up fuel (monitoring plan to be revised for increased coal use)	45 CSR 2A §6.2.b
Fuel Oil	Demonstrated compliance – COM not required	45 CSR 2A §6.2.a.1

**PROPOSED
MONITORING & RECORDKEEPING PLANS
FOR SULFUR OXIDE SOURCES
UNDER 45 CSR 10
AT WEIRTON STEEL CORPORATION
WEIRTON, WEST VIRGINIA**

**FEBRUARY 2001
(Revised August 2001)**

(a) Regulatory Requirement

In accordance with 45 CSR 10 §8.2.c, the following is the proposed plan for monitoring compliance with the sulfur dioxide weight emissions standards expressed in 45 CSR 10 §3, 4 and 5.

(b) Facility Information:

Facility Name: Weirton Steel Corporation

Facility Address: Weirton Steel Corporation
400 Three Springs Drive
Weirton, West Virginia 26062

Facility Contact: Clark Francy
(724) 797-3908

Facility Description:

Weirton Steel Corporation is an integrated steel mill.

It is located in the City of Weirton, Hancock County, West Virginia.

Operations include:

- Iron Making
- Steel Making
- Steel Rolling, Finishing and Coating

(c) Affected Units:

Units which are regulated by 45 CSR 10 are Fuel Burning Units as defined in 45 CSR 10 §2.8 and Manufacturing Process as defined in 45 CSR 10 §2.11 and Combustion Sources as defined in 45 CSR 10A §6.3.

Those units which are solely fueled by natural gas are exempt from the requirements of 45 CSR 10 § 8 and therefore are not included in this plan. (45 CSR 10 § 10.3 & 45 CSR 10A §3.1.b)

The specific units affected are:

Fuel Burning Units

- # 3 Boiler
- # 4 Boiler
- # 5 Boiler
- # 101 and #102 Boilers (common stack)

Manufacturing process units

- No. 1 Blast Furnace Stoves
(#1,#2,#3 – Combined Stack)
- No. 4 Blast Furnace Stoves
(#11, #12, #13 – Combined Stack, #14 – Separate Stack)
- No. 2 Blast Furnace Flare (Receives gas from No.1)
- No. 4 Blast Furnace Flare
- No. 1 Blast Furnace Slag Granulator

There is no combustion associated with the No. 1 Blast Furnace Slag Granulator. The sulfur dioxide emissions are generated from residual sulfur compounds in the slag. All other manufacturing process sources are also combustion sources.

Combustion Units

The following units are also fueled with process gas from blast furnace operations and in addition to being a fuel burning unit or manufacturing process unit are also defined as a combustion unit per 45 CSR 10A §6.3. These units are:

- # 3 Boiler
- # 4 Boiler
- # 5 Boiler
- # 101 and #102 Boilers (common stack)
- No. 1 Blast Furnace Stoves
(#1,#2,#3 – Combined Stack)
- No. 4 Blast Furnace Stoves
(#11, #12, #13 – Combined Stack, #14 – Separate Stack)
- No. 2 Blast Furnace Flare (Receives gas from No.1)
- No. 4 Blast Furnace Flare

(d) Proposed Monitoring

Boiler #3, Boiler #4

Fuels used in these units are natural gas, mixed gas (70% natural gas/30%make-up air), blast furnace gas, fuel oil or coal. These units are both fuel burning units and combustion units.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H₂S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMS to satisfy the requirements of an approved monitoring plan. Therefore, CEMS are not required as part of the monitoring plan for these units.

Boilers #3 and 4 can also burn coal. Currently, coal is considered a back-up fuel and has not been used for some time. Weirton has no current plans to use coal in these boilers, but wants to maintain this capability. To this end, coal usage is not considered in this monitoring plan. However, Weirton Steel would submit for review and approval a revised monitoring plan prior to burning coal in these boilers.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. The sulfur concentration for the various fuels will be determined as follows:

- Natural Gas and Mixed Gas - the sulfur content provided by the supplier will be used.
- Fuel Oil - the sulfur concentration provided on the manufacturer's certificate of analysis or product specifications will be utilized for the daily "as burned" fuel analysis. Received fuel oil shipments are approximately 2.5 million gallons and last approximately 2 months. Sulfur concentrations will be adjusted upon receipt of additional shipments on an average basis.
- Blast Furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.
- Coal - is currently considered a back-up fuel and has not been used recently. Prior to using coal, this portion of the monitoring plan will be amended and the entire plan resubmitted for approval.

Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Date of start-up and shutdown
- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas and resulting mixed gas (70% natural gas/30% make-up air) - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.
- Fuel Oil - Shipment BTU and sulfur analysis as provided by the supplier.
- Coal - Shipment BTU and sulfur analysis as provided by the supplier.

Boiler #5

Fuels used in this unit are natural gas, mixed gas (70% natural gas/30% make-up air), blast furnace gas and/or fuel oil. This unit is both a fuel burning unit and a combustion unit.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H₂S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMS to satisfy the requirements of an approved monitoring plan. Therefore, CEMS are not required as part of the monitoring plan for these units.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. The sulfur concentration for the various fuels will be determined as follows:

- Natural Gas and Mixed Gas - the sulfur content provided by the supplier will be used.
- Fuel Oil - the sulfur concentration provided on the manufacturer's certificate of analysis or product specifications will be utilized for the daily "as burned" fuel analysis. Received fuel oil shipments are approximately 2.5 million gallons and last approximately 2 months. Sulfur concentrations will be adjusted upon receipt of additional shipments on an average basis.
- Blast Furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Date of start-up and shutdown
- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas and resulting mixed gas (70% natural gas/30% make-up air) - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.
- Fuel Oil - Shipment BTU and sulfur analysis as provided by the supplier.

Boiler #101 and Boiler #102

Fuels used in these units are natural gas and blast furnace gas. These units are fuel burning units and combustion units.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H₂S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMS to satisfy the requirements of an approved monitoring plan. Therefore, CEMS are not required as part of the monitoring plan for these units.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. The sulfur concentration for the various fuels will be determined as follows:

- Natural Gas - the sulfur content provided by the supplier will be used.
- Blast Furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each boiler shall include:

- Date of start-up and shutdown
- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.

No. 1 Blast Furnace Stoves (3) and No. 4 Blast Furnace Stoves (4)

Fuels used in these units are natural gas and blast furnace gas. These units are manufacturing process units and combustion units.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H₂S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMS to satisfy the requirements of an approved monitoring plan. Therefore, CEMS are not required as part of the monitoring plan for these units.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. The sulfur concentration for the various fuels will be determined as follows:

- Natural Gas - the sulfur content provided by the supplier will be used.
- Blast Furnace Gas - is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each blast furnace stoves shall include:

- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas and resulting mixed gas (70% natural gas/30% make-up air) - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.

No. 2 Blast Furnace Flare and No. 4 Blast Furnace Flare

Excess blast furnace gas is burned in these units. These units are manufacturing process units and combustion units.

Stream sampling has shown that the blast furnace process gas which is burned contains less than 45 grains of H₂S per 1000 cubic feet. Per 45 CSR 10A § 6.3.b, "The owner or operator of a combustion source(s) which has a refinery process gas stream or any other process gas stream that contains an average hydrogen sulfide concentration greater than or equal to 45 grains per 100 cubic feet shall use CEMS to satisfy the requirements of an approved monitoring plan. Therefore, CEMS are not required as part of the monitoring plan for these units. In addition, these units are flares and this would not be a feasible application for a CEM.

The proposed monitoring plan for these units will be to assume that all sulfur compounds are converted to sulfur dioxide. The sulfur concentration for the various fuels will be determined as follows:

- Blast Furnace Gas – is significantly lower in sulfur than the 45 grains per 100 cubic feet noted in the regulation requiring a CEM. In addition sampling and analysis are not easily performed. Annual sulfur analysis will be performed for two consecutive years and used to establish sulfur concentration in this fuel.

Reporting, Recordkeeping and Operating Parameters

Per the requirements of 45 CSR 10A §7.1, records shall be maintained noting operating schedule, and the quality and quantity of fuel burned.

Operating schedule records for each flare shall include:

- Daily quantity and type of fuel burned

Fuel Quality

- Natural gas and resulting mixed gas (70% natural gas/30% make-up air) - annual supplier provided BTU and sulfur analysis.
- Blast furnace gas - established analysis, as described above, from an outside certified laboratory.

No. 1 Blast Furnace Slag Granulator

The emissions based upon previous testing are significantly below the allowable level under this unit's operating permit. Weirton Steel Corporation does not believe a CEM is appropriate means to measure sulfur dioxide emissions from this source.

Weirton Steel Corporation proposes stack testing, at no more frequent than 5 year intervals, instead of a CEM per 45 10A CSR §6.2.b.1 for the following reasons:

- High moisture concentrations in the exhaust stream result in extreme operational and maintenance issues for a CEM.
- Intermittent operation does not support the use of a CEM in this service.
- The current condition of the steel industry would make the installation of a CEM for this service a severe financial hardship for this facility.

Reporting, Recordkeeping and Operating Parameters

There are no specific reporting requirements in 45 CSR 10A §7.1 for this type of source. For this source, Weirton Steel Corporation will maintain operating schedule records which shall include:

- Date and time of start-up and shutdown

(e) Monitoring Plan Recordkeeping

All applicable records shall be kept for a period of five years.

(f) Excursion Response Plan

Weirton Steel Corporation controls sulfur dioxide emissions by controlling fuel sulfur concentration and the quantity of the fuels used. Operating ranges for each boiler is established based upon fuel sulfur concentrations and the quantity used.

Fuels with excessive sulfur concentrations are reviewed and rejected when necessary. Changes of sulfur concentration can impact the quantity of fuel used. If upon review, an excursion is discovered, the fuel usage rate or sulfur concentrations will be adjusted appropriately.

(g) Implementation Plan

Upon approval of this monitoring plan or any subsequent revisions to the plan, an implementation period is necessary to properly commence required testing, data gathering, monitoring, recordkeeping and reporting. The reporting and recordkeeping systems described in this plan require sixty days from the receipt of the final plan approval for implementation. The annual gas sampling, described above, will be initiated within six months from receipt of this approval. The subsequent gas sample will be collected and tested no sooner than six months and no later than one year after the first sample was taken.

Any modification to this plan requires the implementation schedule be reviewed and properly amended. Modifications are any changes to the submitted plan and include but are not limited to variations in monitoring or tracking methodology, additional instrumentation or other capital improvements, and/or additional requests or conditions.